

What is claimed is:

1. A method of manufacturing a chromatographic column comprising the steps of:
molding a column body from plastics, said step of molding a column body including the substeps of molding a side wall portion, a first end portion integrally molded with the side wall portion and an open second end forming an interior of the column body and a closure for the open second end; said first end portion being integrally molded with a first port, said closure being integrally molded with a second port and at least one of said first end portion and closure having integrally molded channels radially extending from the port and opening toward said interior of the column body;
filling the column with packing material up to the second end; and
fastening the closure with a molded port to the column body together at the second end.
2. The method of claim 1 in which the step of fastening the closure includes the step of moving a snap-on end with the molded port onto the column body.
3. The method of claim 2 in which the step of moving a snap-on end includes the step of moving walls of the column body and walls of the snap-on end into contact with each other wherein the walls of the column body and the snap-on end are at an angle to each other whereby the walls of the column body and the snap-on end press against each other to form an interference fit.

4. The method of claim 1 wherein the step of fastening the closure includes the step of spin welding a closure to the side wall portion.

5. The method of claim 1 further including the steps of:

placing a first filter in the first end having said integrally molded port of the column body and;

filling the column with packing material up to the second end;

placing a second filter on top of the packing in the second end.

6. The method of claim 5 in which the step of filling the column with packing material includes the step of vibrating the column to evenly distribute the packing material.

7. The method of claim 1 wherein the step of filling the column with packing material includes the step of filling the column with a polymerization mixture and porogen and polymerizing the polymerization mixture to form a porous plug in the interior.

8. The method of claim 7 wherein the step of polymerizing the polymerization mixture comprises the step of forming a size compensated polymeric plug.

9. The method of claim 1 in which the distance of overlapping of the angled portion of contact between the end member and the walls of the column body is sufficient to create

an interference fit capable of withstanding a pressure higher than an operating pressure of the column.

10. A method of performing chromatography comprising the steps of:

causing solvent to flow from at least one source of solvent through a column said column including a tubular body portion with body walls, an inlet end member having an inlet port, packing material, and an outlet end member having an outlet port, wherein at least one of said inlet end member and outlet end member is integrally molded with the tubular body portion wherein the solvent flows through the inlet port through radial channels integrally formed with the inlet end member and opening toward the packing material, and from the channels into the packing material;

causing the solvent to flow through the packing material; and

causing the solvent to flow through the packing material into the channels integrally formed in the outlet end member into the outlet port.

11. The method of claim 10 further including the step of disposing of the column after between one and ten chromatographic runs and connecting a new column.

12. The method of claim 10 further including the step of connecting the inlet port to a source of one or more solvents.

13. A method of claim 10 further comprising the steps of:
causing solvent to flow from the inlet end member and inlet port through an inlet filter, the packing material, and an outlet filter to the outlet end member and through the outlet port.

14. The method of claim 13 further including the step of disposing of the column after between one and ten chromatographic runs and connecting a new column

15. The method of claim 13 further including the step of connecting the inlet port to a source of one or more solvents.

16. The method of claim 13 wherein the solvent is caused to flow from the inlet port through inlet channels across a cross-section of the column and through the inlet filter.

17. The method of claim 13 wherein the solvent is caused to flow through the packing material into the outlet filter and through the outlet filter into channels radiating from a circumference of the body walls and into the outlet port.

18. A chromatographic column comprising:
a tubular body portion adapted to receive packing material;
a first end integrally formed with said tubular body portion and having a port;

a second end separately formed from said tubular body portion and having an integrally molded port;

at least one of said first and second ends having a plurality of channels radially extending from the port with an opening onto the tubular body portion.

19. The chromatographic column of claim 18 in which one of said tubular body portion and said second end includes a plurality of biased spring members and the other of said tubular body portion and second end including a corresponding plurality of detents; said detents and spring members being shaped so as to latch upon movement of said second end onto said tubular body portion with an interference fit.

20. The chromatographic column of claim 18 further including a first filter, a second filter and said packing material between said first and second filters.

21. The chromatographic column of claim 18 further including a porous polymeric plug.

22. The chromatographic column of claim 21 in which the porous polymeric plug is a size compensated porous polymeric plug.

23. A chromatographic column in accordance with claim 20 further including a secondary seal between at least one of the first and second filters and a the port at a corresponding one of the first and second ends.